Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

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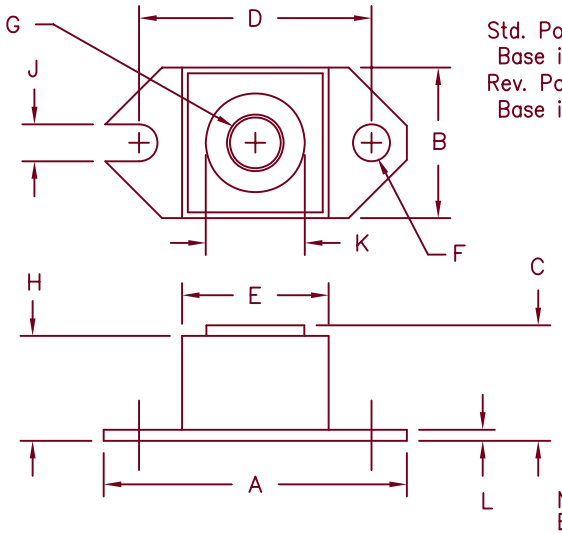
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

Ultrafast Recovery Modules

HU100, 101 & 102



Std. Polarity
Base is cathode
Rev. Polarity
Base is anode

Dim.	Inches		Millimeter		
	Minimum	Maximum	Minimum	Maximum	Notes
A	1.52	1.56	38.86	39.62	
B	.725	.775	18.42	19.69	
C	.605	.625	15.37	15.88	
D	1.177	1.197	29.90	30.41	
E	.745	.755	18.92	19.18	Sq.
F	.152	.162	3.86	4.11	Dia.
G		1/4-20 UNC-2B			
H	.540	.580	13.72	14.73	
J	.152	.162	3.86	4.11	
K	.495	.505	12.57	12.83	Dia.
L	.120	.130	3.05	3.30	

Notes:
Baseplate: Nickel plated copper

Microsemi Catalog Number		Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
HU10005*		50V	50V
HU10010*		100V	100V
HU10015*		150V	150V
HU10020*	HU10120*	200V	200V
	HU10130*	300V	300V
	HU10140*	400V	400V
	HU10150*	500V	500V
HU10260*		600V	600V
HU10270*		700V	700V
HU10280*		800V	800V

Add Suffix R for Reverse Polarity

- Ultra Fast Recovery
- 175°C Junction Temperature
- V_{RRM} 50 to 800 Volts
- High surge capacity
- 100 Amp current rating

Electrical Characteristics

		HU100	HU101	HU102	
Average forward current	$I_{F(AV)}$	100A	100A	100A	Square Wave
Case Temperature	T_C	135°C	120°C	115°C	$R_{\theta JC}$ = 0.5°C/W
Maximum surge current	I_{FSM}	1500A	1400A	1200A	8.3ms, half sine, T_J = 175°C
Max peak forward voltage	V_{FM}	.975V	1.25V	1.35V	I_{FM} = 100A: T_J = 25°C*
Max reverse recovery time	trr	50ns	70ns	90ns	1/2A, 1A, 1/4A, T_J = 25°C
Max peak reverse current	I_{RM}	———	6.0mA	———	V_{RRM}, T_J = 125°C
Max peak reverse current	I_{RM}	———	50µA	———	V_{RRM}, T_J = 25°C
Typical Junction capacitance	C_J	575pF	300pF	275pF	V_R = 10V, T_J = 25°C

*Pulse test: Pulse width 300 usec, Duty cycle 2%

Thermal and Mechanical Characteristics

Storage temp range	T_{STG}	-55°C to 175°C
Operating junction temp range	T_J	-55°C to 175°C
Max thermal resistance	$R_{\theta JC}$	0.5°C/W Junction to case
Typical thermal resistance (greased)	$R_{\theta CS}$	.012°C/W Case to sink
Terminal Torque		35-40 inch pounds
Mounting base torque – (outside holes)		20-25 inch pounds
Weight		1.1 ounces (32 grams) typical

SCOTTSDALE Microsemi

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05-03-07 Rev. 1

HU100

Figure 1
Typical Forward Characteristics

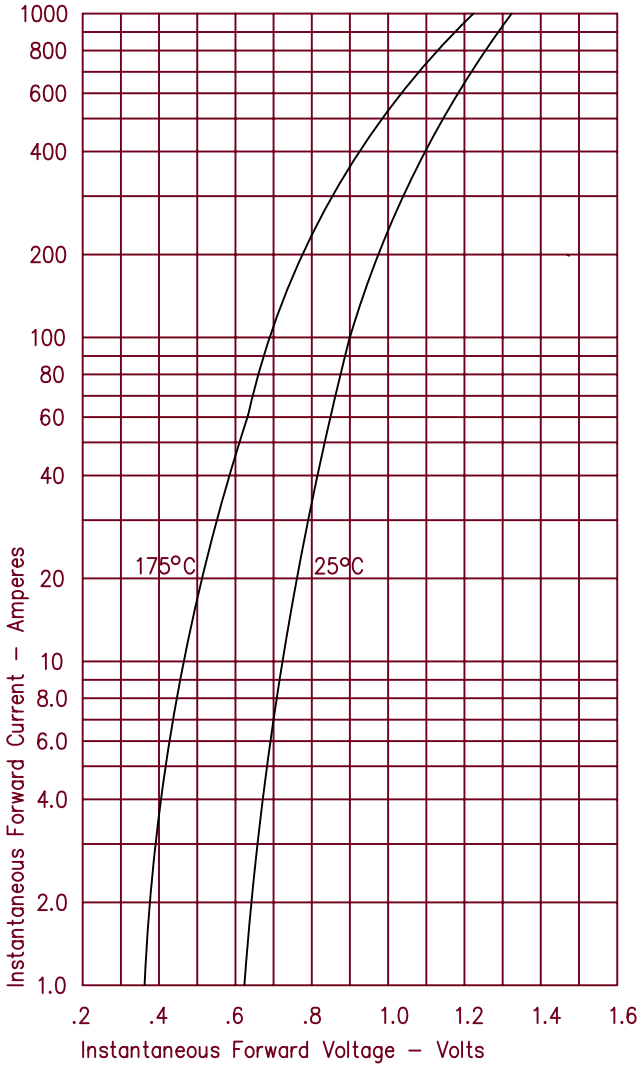


Figure 2
Typical Reverse Characteristics

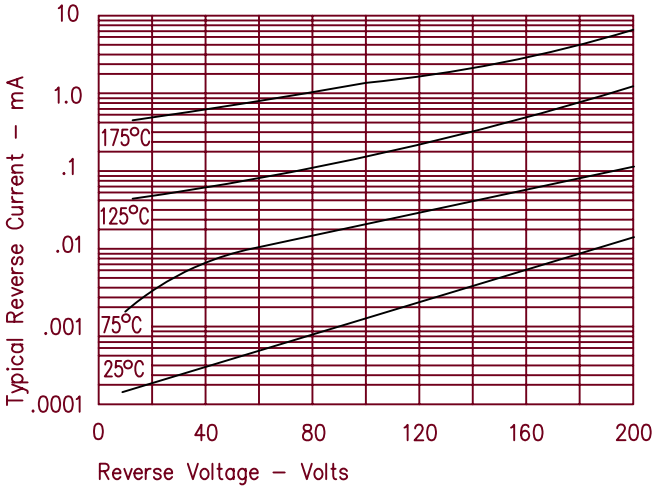


Figure 3
Typical Junction Capacitance

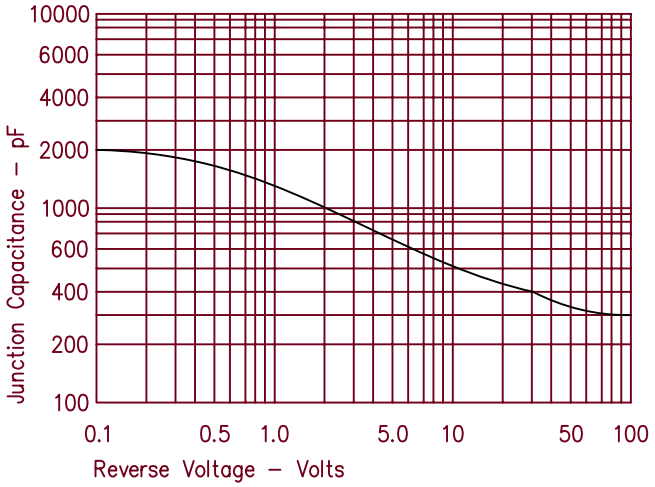


Figure 4
Forward Current Derating

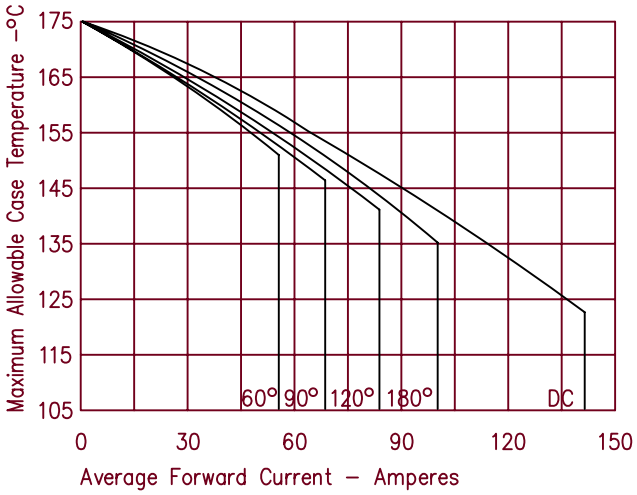
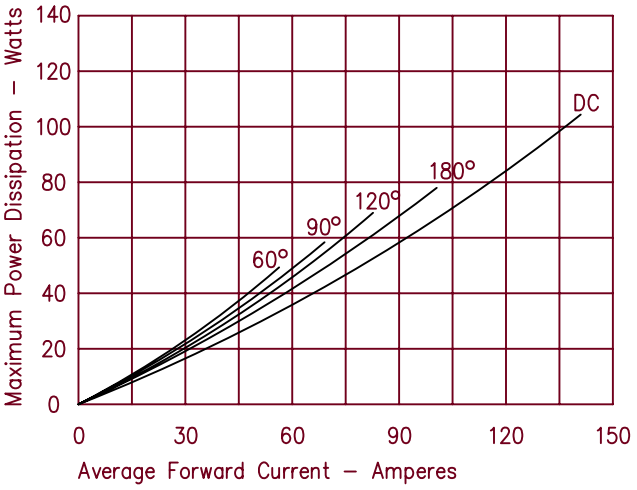


Figure 5
Maximum Forward Power Dissipation



05–03–07 Rev. 1

HU101

Figure 1
Typical Forward Characteristics

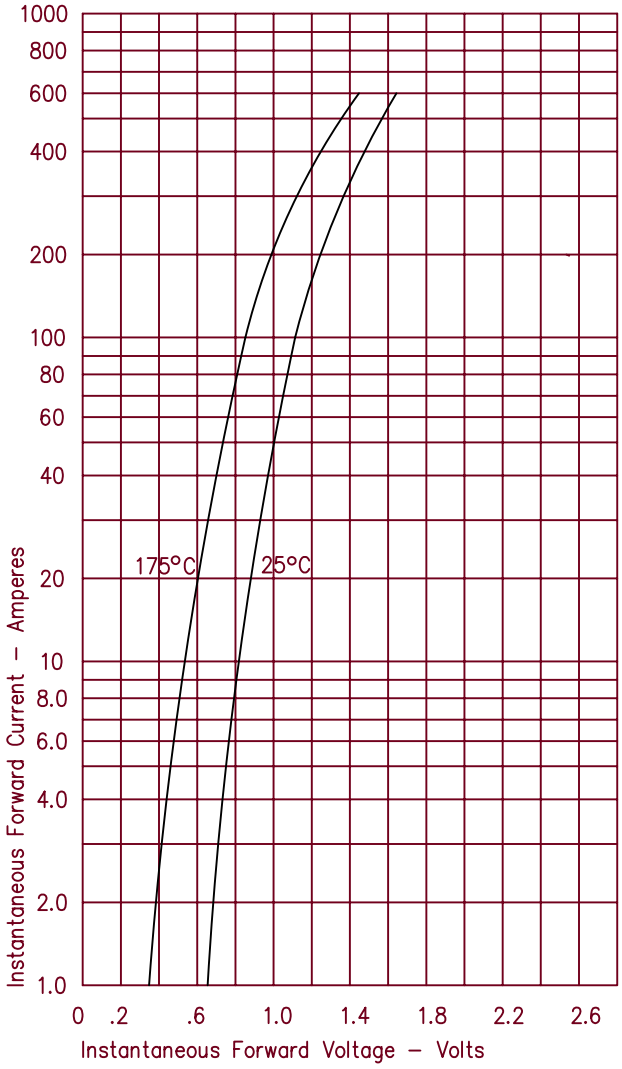


Figure 2
Typical Reverse Characteristics

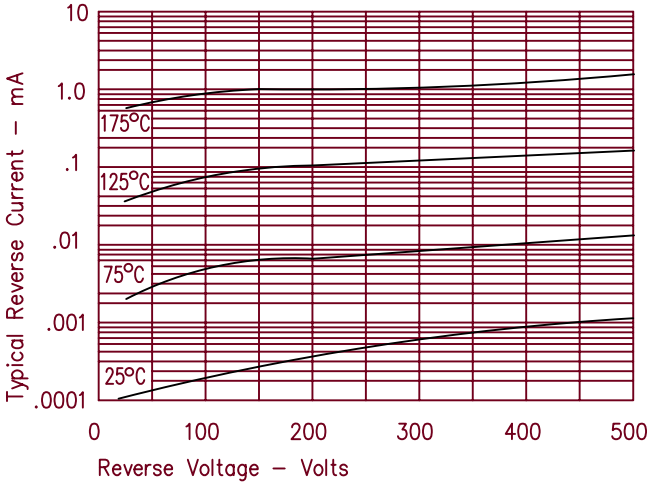


Figure 3
Typical Junction Capacitance

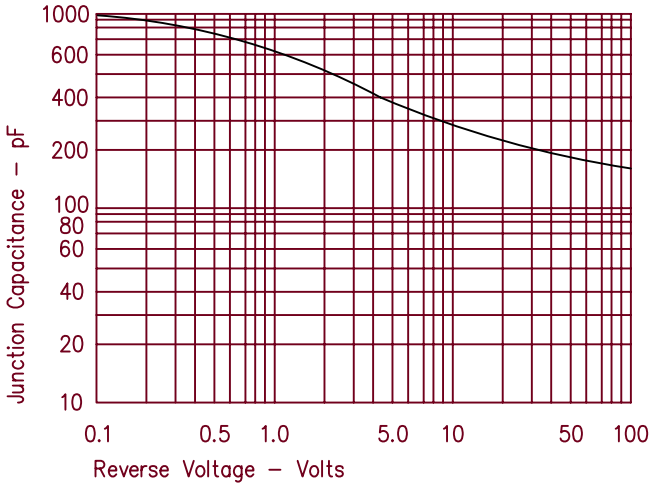


Figure 4
Forward Current Derating

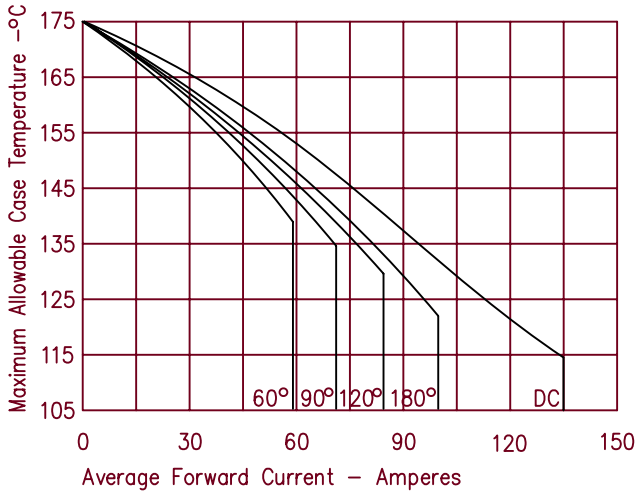
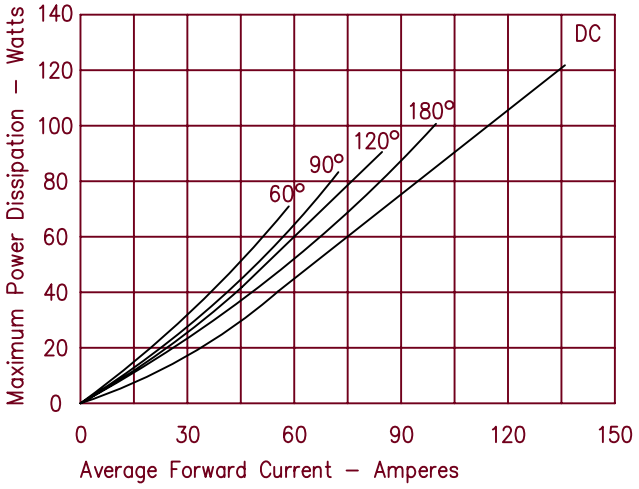


Figure 5
Maximum Forward Power Dissipation



HU102

Figure 1
Typical Forward Characteristics

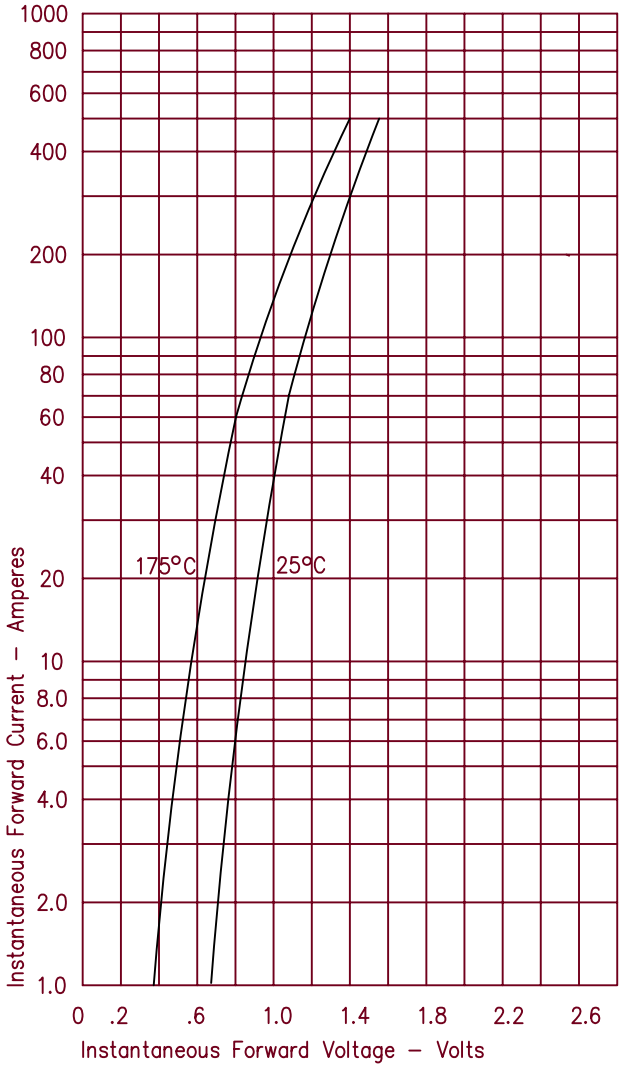


Figure 2
Typical Reverse Characteristics

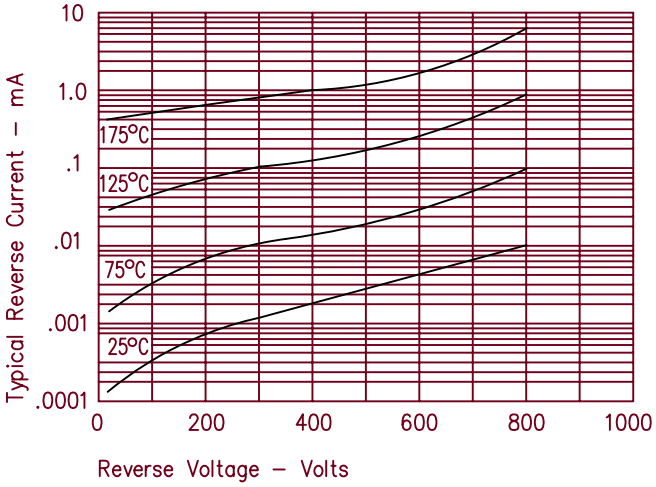


Figure 3
Typical Junction Capacitance

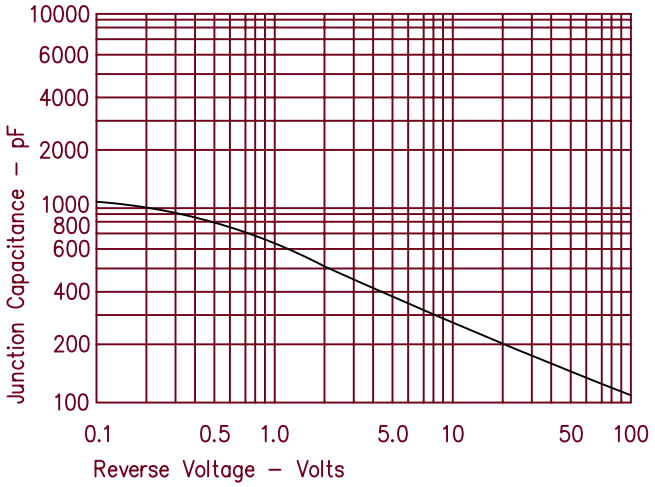


Figure 4
Forward Current Derating

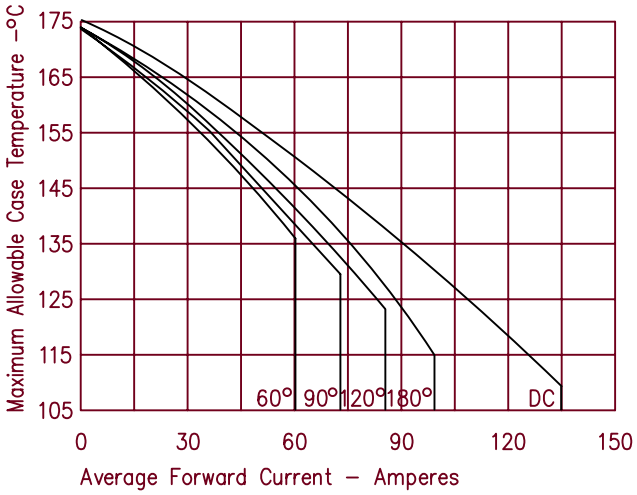


Figure 5
Maximum Forward Power Dissipation